

SONIC MODELL



INTRODUCTORY DOCUMENT



GETTING STARTED

We all love twin-engine planes, don't we?: They look cool in the sky, sound great and satisfy that folk tale in the back of our brains (which is completely true), that "if one engine fails, we have more chances to make it home than with a single-engine aircraft".

This is the first time that SonicModell releases a plane based on requirements from private and government organizations to the hobby community.

That's right, Binary wasn't born for the FPV enthusiasts, but for the people that flies every day UAVs for a living. Many of those organizations were flying several type of airframes (usually extremely large) and approached us with a list of requirements for a plane, that can not only be used for their missions, but also to train new pilots. They needed something easier to carry, fully featured, and with lower risk in case of a crash. Yes, huge, heavy birds they do their job, but in the words of some of the pro pilots: "We do a lot of our missions over urban terrain... if an 8Kg UAV will hit your head while your walking to work, your day will be ruined... Having said that, we cannot compromise performance and features. They all should be there".

Having that in mind and for the lapse of one year, we created several prototypes, until we got the perfect balance in every area without compromises. As we're writing this, Binary has been adopted as a quick deployment UAV by 4 different government organizations, 3 private companies (Mapping, Security survey and Sea life watch). According to their records, in total, Binary has more than 375 successful missions (with no planes lost so far), hundreds of hours of training for rookie pilots and has been proven in the hardest conditions.

Now it's time to release her to the FPV community. This document is the introductory view for the BNY-1, variant of the Binary airframe, optimized for mass production, aimed to professionals and hobby pilots.



FEATURES

- Powerful twin-motor configuration, specially designed for long range FPV with huge payload capabilities.
- Carefully considered detachable system for the main wing, easy to assemble in just a few minutes.
- Removable motor and ESC hatch for easy maintenance and part replacement.
- Ailerons, flaps and elevator with built-in carbon fiber rods for extra reinforcement.
- Multi-camera nose mount to accommodate virtually ANY FPV / HD camera in the market.
- Extra flexible belly mapping camera bay, with great DIY possibilities. Ideal for survey and dual-camera setups.
- Tons of room inside the fuselage for more FPV gear and bigger batteries, reinforced by carbon fiber strips along the fuselage.
- Clean and clever internal design will let you decide exactly where you want to place your gear for minimum interference.
- Modular designed landing gear, easy to attach and detach, makes takeoff and landings much easier.
- CG bumps under the main wing.
- Optional DUSK lighting system, with 3-position PWM control: OFF / NAV lights / NAV lights + Landing lights.
- High-impact plastic protection in case you don't want to use a landing gear.
- Detachable clear front canopy for better aerodynamics.
- Fully functional pre-moulded flaps.

KIT Version includes:

KIT SonicModell Binary include all EPO parts / hardware / carbon fiber tubes, SEA RESCUE stickers, belly protection but not including landing gear, LED light system, power combo, mapping camera dock.



SPECS

- Brand Name: SonicModell
- Item Name: SonicModell Binary
- Material: High Quality EPO
- Wingspan: 1200mm (47.24")
- Length: 953mm (37.52")
- Recommended Optimized Power Combo (not included)
- Motor: 2212-1100KV * 2
- ESC: 40A w/5V 3A BEC * 2
- Servos: 9g metal gear * 6
- Prop: 3-blade 8*4.5 * 2
- Flying speed: 30-110+km/h
- Recommended Battery:
- 4S 3000-5400mah (not included)

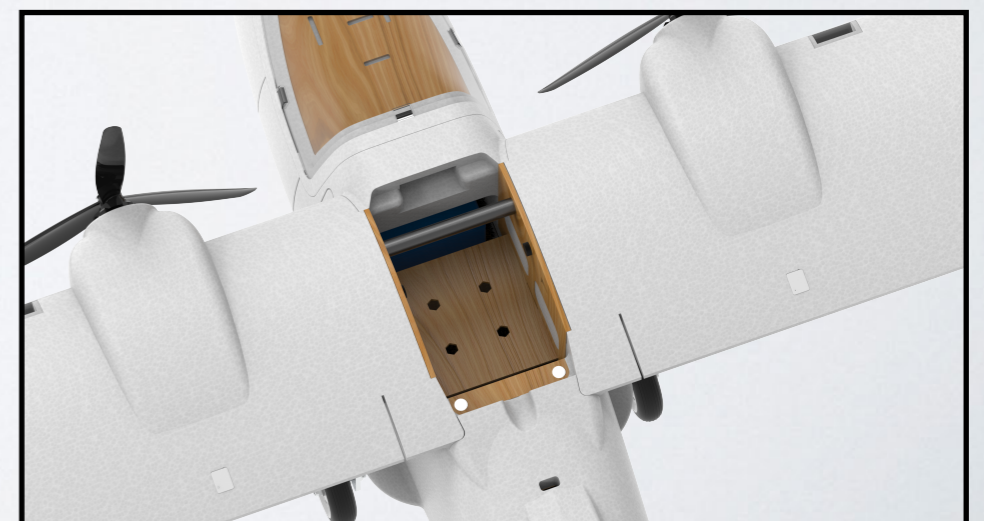


DETAILS



Wiring runs clean and easy through the dedicated routing and slots on the main wings and fuselage.

There's enough space in there to run absolutely any piece of gear you want.



DETAILS



The airframe is light but extremely resistant to rough landings (remember its original purpose). The huge undivided internal space will let you build your dreamt setup with ease.

DETAILS



For those less-than-ideal terrains, we included a high-impact plastic belly protection. This will assure you to have a long lasting plane for many flights to come.

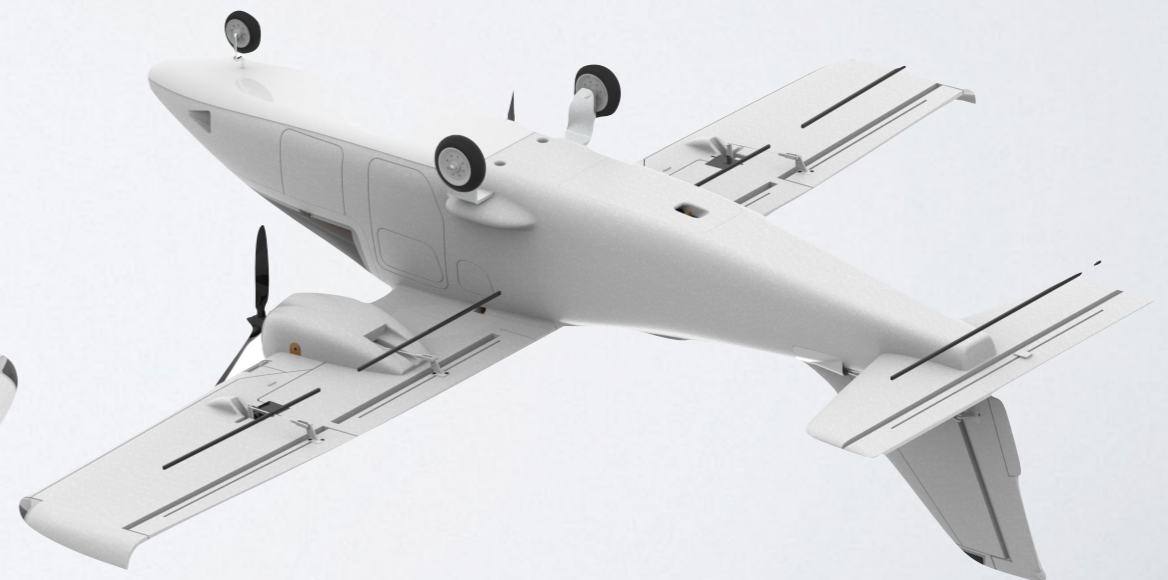
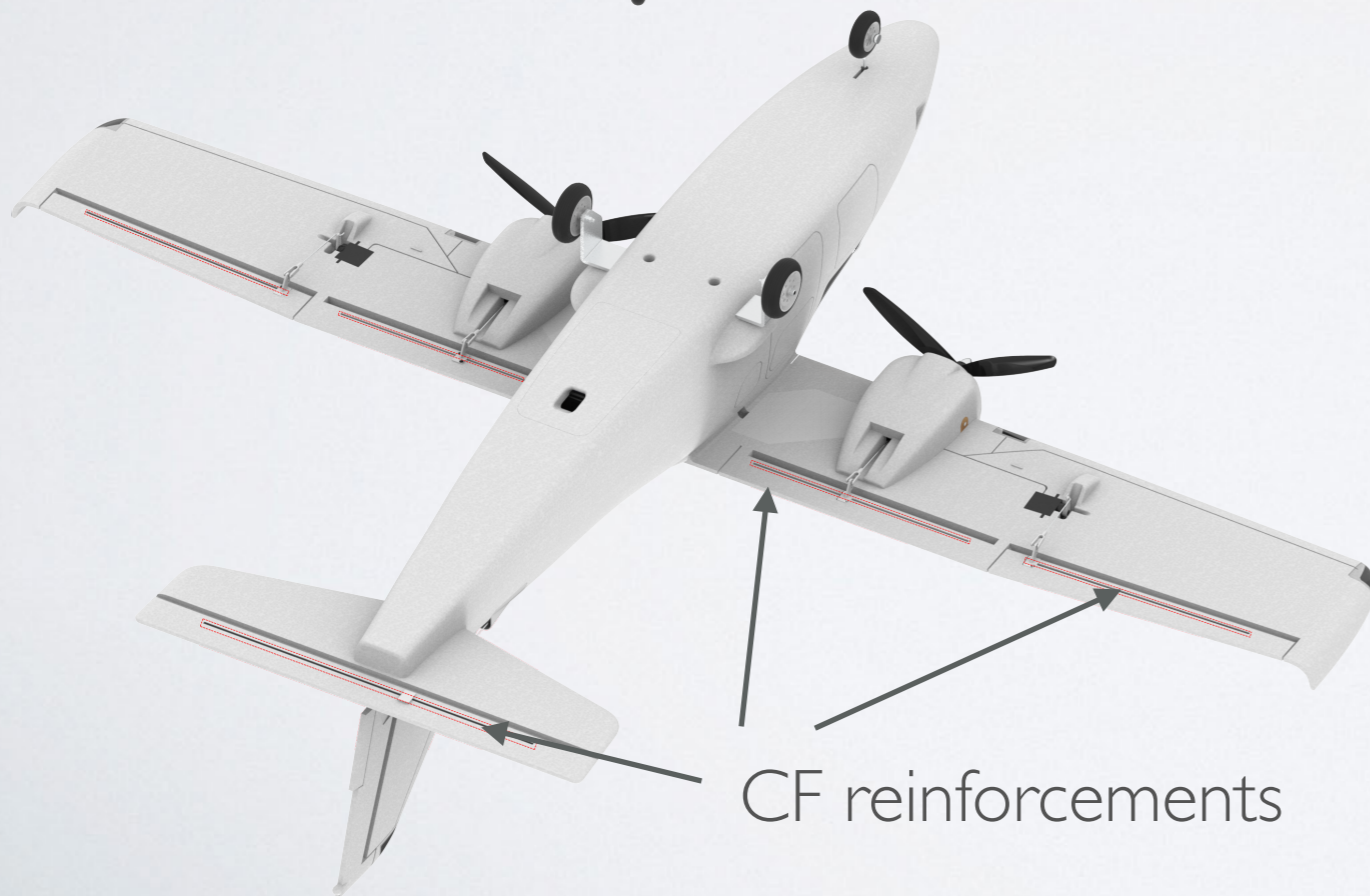
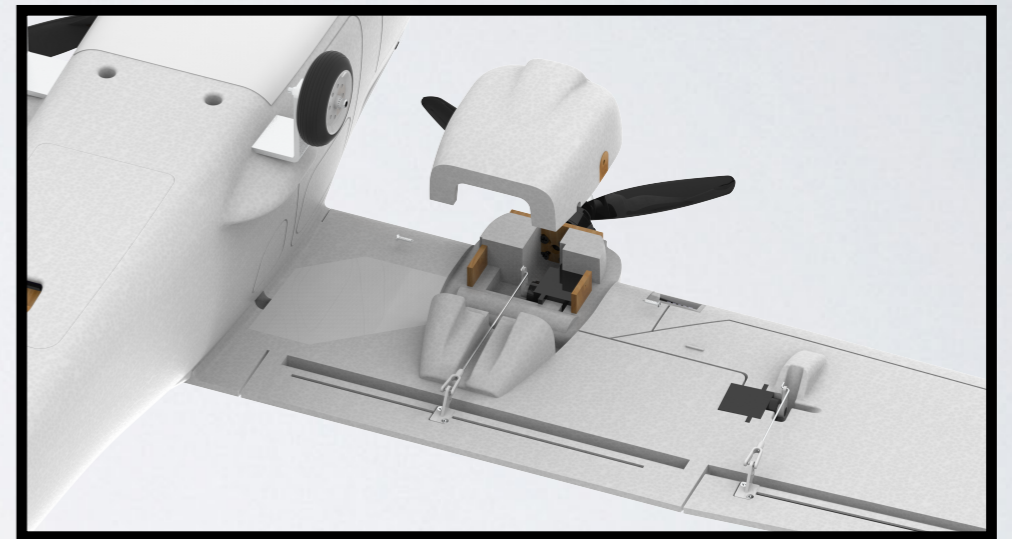
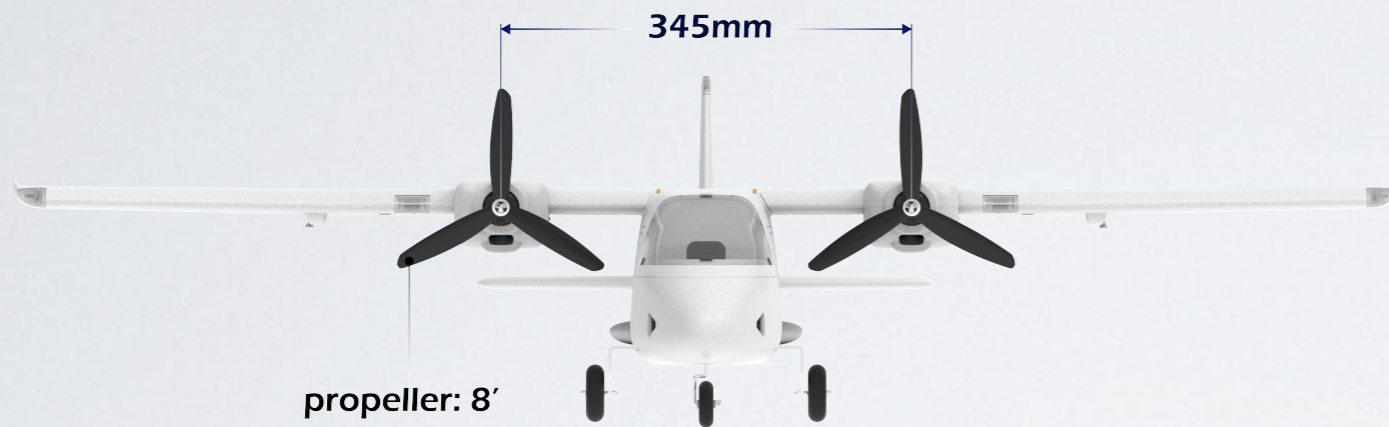
* Included with the KIT

DETAILS



We have successfully tested Binary taking off with 3kg AUW (all-up weight). For those heavier setups, you may want to take off from a runway. A high quality aluminum rear landing gear and light weight yet strong nose gear (3mm wire) will let you do that without sweating.

DETAILS





ACCESSORIES: POWER COMBO

This is our choice for a balanced and reliable power combo:

- Motor: SunnySky 2212-1100KV * 2 pcs
- ESC: SM 40A w/5V 3A BEC * 2 pcs
- Servos: 9g metal gear * 6 pcs
- Prop: 3-blade 8*4.5 * 2 pcs
- “Y” servo harness * 3 pcs
- Extension servo lead * 6 pcs
- Extension servo lock * 6 pcs
- XT60 “Y” harness”

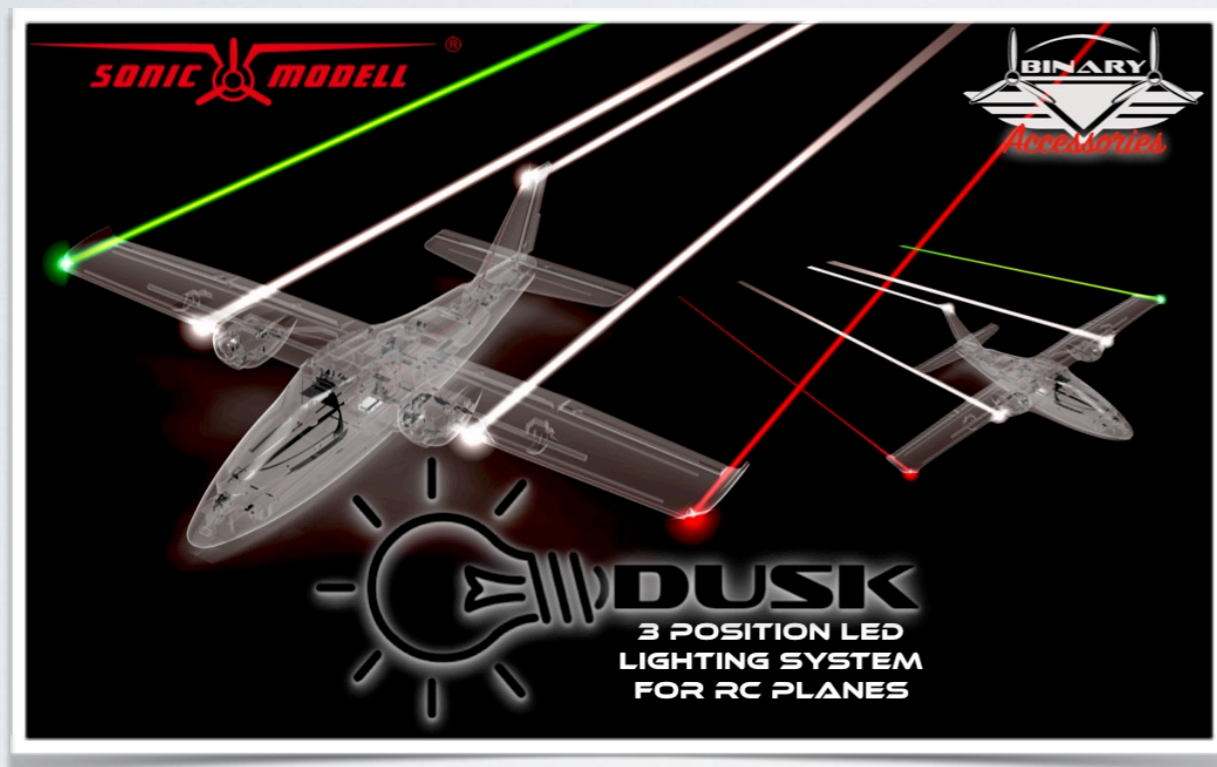


ACCESSORIES: LANDING GEAR



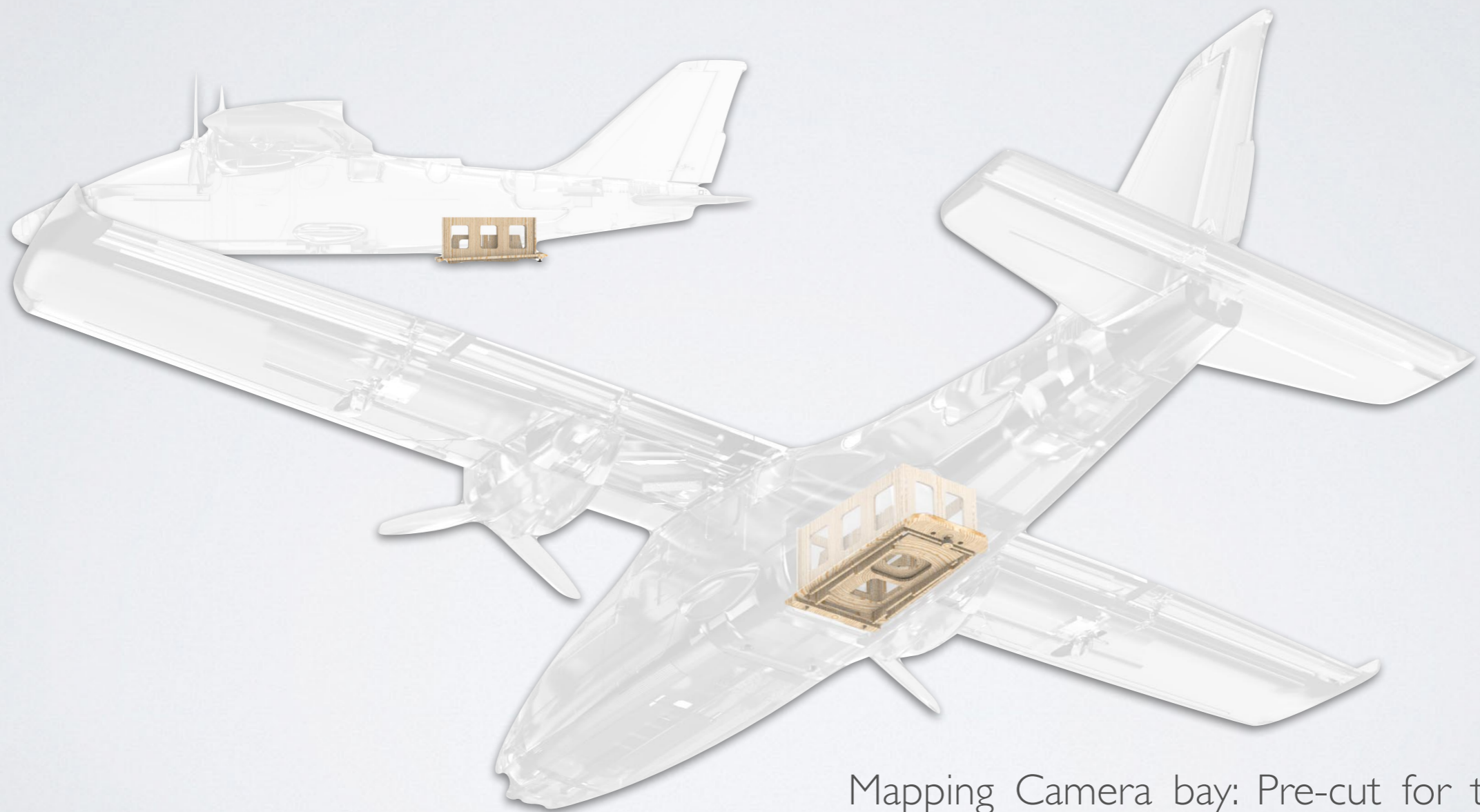
Modular landing gear: Front and rear landing gear set.

ACCESSORIES: NAV & LANDING LIGHTS



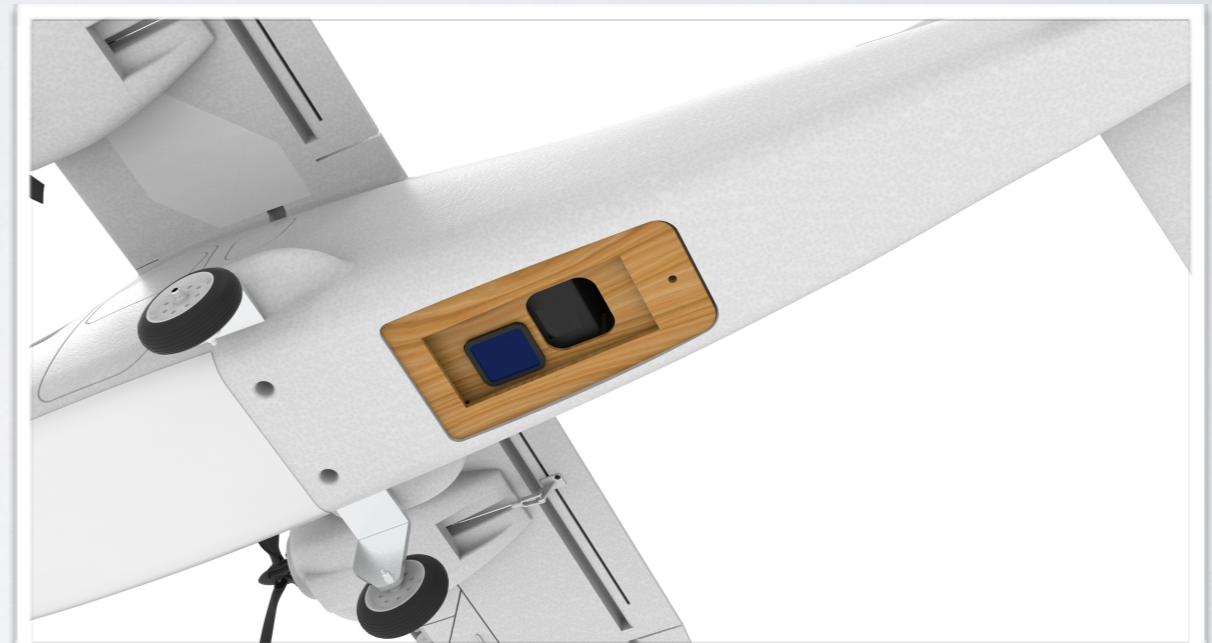
DUSK: SonicModell's exclusive 3-position lighting system

ACCESSORIES: MAPPING CAMERA BAY



Mapping Camera bay: Pre-cut for the most popular HD camera models and unlimited possibilities for DIY

ACCESSORIES: MAPPING CAMERA BAY



GALLERY

DIY CAMO COLOR SCHEME



GALLERY

DIY MILITARY GREY COLOR SCHEME



GALLERY

“SEA RESCUE” STICKERS COLOR SCHEME



* Included with the KIT



GALLERY

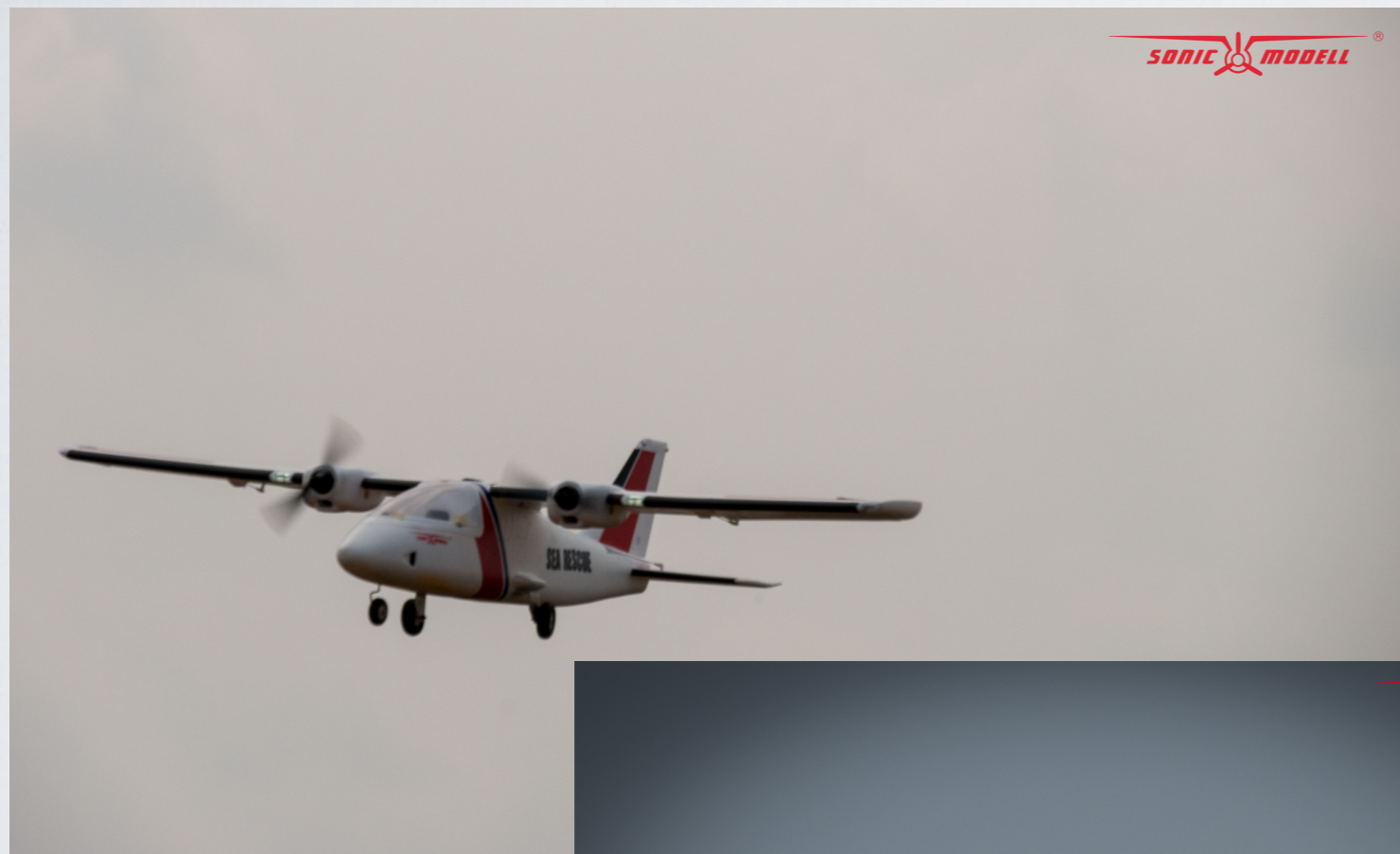
ACTION SHOTS





GALLERY

ACTION SHOTS





GALLERY





GALLERY





GALLERY





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GALLERY

